



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/689,429	10/12/2000	William W. Lee	THEOR 201..IUS	7077
24972	7590	06/25/2004	EXAMINER	
FULBRIGHT & JAWORSKI, LLP			KIANERSI, MITRA	
666 FIFTH AVE			ART UNIT	
NEW YORK, NY 10103-3198			PAPER NUMBER	

2143

DATE MAILED: 06/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/689,429

Applicant(s)

LEE ET AL.

Examiner

mitra kianersi

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### ***Response to Amendment***

The Declaration filed on 04/19/2004 under 37 CFR 1.131 has been considered but is ineffective to overcome the Apt et al (US 6,269,373) reference.

The evidence submitted is insufficient to establish a conception of the invention prior to the effective date of the Apt et al (US 6,269,373). While conception is the mental part of the inventive act, it must be capable of proof, such as by demonstrative evidence or by a complete disclosure to another. Conception is more than a vague idea of how to solve a problem. The requisite means themselves and their interaction must also be comprehended. See *Mergenthaler v. Scudder*, 1897 C.D. 724, 81 O.G. 1417 (D.C. Cir. 1897). The Exhibits A, B and C fail to show that the claimed invention was conceived well prior to 02/26/1999. For the above-mentioned reason the previous rejection maintains.

Claims 1-14 have been examined.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 5-9, 12-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Apte et al. (US Patent No. 6,269,373)

1. As per claim 1, Apte et al. teach a method of extending EJB Handles for use with Enterprise JavaBeans (EJBs) to provide a Smart Handle, comprising the steps of: maintaining an Entity EJB object relationship through a combination of a proxy pattern, an EJB Handle, and a primary key of the EJB Handle; (corresponds to creation of entity bean, col 16, lines 40-52), storing EJB Home class from which an Entity EJB was generated and from which said Entity EJB can be re-instantiated (col 16, lines 53-56); and maintaining an instance of a Smart Key that describes said primary key for a database column to which an Entity EJB object is mapped. (corresponds to when the entity bean data is automatically maintained, col 16, lines 57-65, and col 17, lines 21-28)

2. As per claim 2, Apte et al. teach a method further comprising the steps of instantiating said Entity EJB object associated with said Smart Handle with a single method invocation. (corresponds to stateful session bean, col 16, lines 10-17)

3. As per claim 5, wherein said SmartKey includes said primary key of the EJB Handle, thereby providing portability to said Entity EJB object. (corresponds to portable, downloadable object implementations, and Java interface definitions, among others. col 8, lines 58-67)

4. As per claim 6, further comprising the step of assigning each attribute of said Entity EJB object and said SmartKey to a separate column within a relational database table, thereby permitting said Smart Handle to be mapped to a multi-column relational database table. (corresponds to a container implemented on top of an RDBMS may manage persistence by storing each bean's data as a row in a table. Col 16, lines 57-61, Apte et al.)

Art Unit: 2143

5. As per claim 7, wherein said Smart Handle includes at least attributes HomeClassName, KeyClassName, and HomeName. (corresponds to software entities comprising data elements or attributes and methods, which manipulate data elements. Col 6, lines 5-9)
6. As per claim 8, a SmartHandle for extending EJB Handles for use with Enterprise JavaBeans (EJBs), comprising:
- EJB Home class from which an Entity EJB was generated and from which said Entity (EJB) can be re-instantiated; and (corresponds to creation of entity bean, col 16, lines 40-52),
  - an instance of a SmartKey that describes said primary key for a database column to which an Entity EJB object is mapped; (col 16, lines 53-56);
  - wherein said Smart Handle maintains an Entity EJB object relationship through a combination of a proxy pattern, an EJB Handle, and a primary key of the EJB Handle; (corresponds to when the entity bean data is automatically maintained, col 16, lines 57-65, and col 17, lines 21-28)
7. Claims 9 and 12-14 recite the same limitations as claims 2 and 5-7. Therefore, they are analyzed and rejected by the same rationale.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-4 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Apte et al. (US Patent No. 6,269,373) and further in view of Acker et al. (US 2002/0147696).

8. As per claim 3, Apte et al. teach a method wherein said single method invocation includes the steps of using reflection to obtain an `jbFindByPrimaryKey` method; and invoking said `ejbFindByPrimaryKey` method with said `SmartKey`. (corresponds to EJB being invoked by clients, col 7, lines 31-38) and also see (col 6, lines 58-67)

Apte do not explicitly teach locating a EJB Home class using Java Naming and Directory Interface (JNDI); Apte et al. teach an EJB Handle is a Java interface defined in the EJB standard specification where a serialized EJB Handle object contains references to the Handle implementation class. (col 2, lines 17-26). However, Acker et al. teach a Java Naming and Directory Interface (JNDI) that provide directory and naming functionality for Java applications, paragraph [0006]. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate Apte's idea of EJB Handle as a Java interface with Acker et al. Java naming and Directory Interface (JNDI) for improving object interaction and name service behavior in an object-oriented environment.

9. As per claim 4, further comprising the steps of:

- implementing `java.util.Comparable` interface; (corresponds to a route of Unit Test on local machines, Functional Test and Integration Test on departmental machines, and Production Test on globally available machines, each set of machines using a different name service scope, it is desirable to allow rebinding of the EJBs in an appropriate scope of the namespace without having to change the EJB deployment data and redeploying. Paragraph [0045], Acker) and

- delegating to a `SmartKey` class that implements a Java code to perform a field-by-field comparison of attributes associated with said primary key, thereby permitting two EJB Handles to be compared without instantiating the corresponding Entity EJB Objects. (a delegation model could just as easily be used, or the scoped initial context factory could completely implement the

javax.naming.spi.InitialContextFactory interface. Paragraph [0038], Acker)

10. Claims 10-11 recite the same limitations as claims 3-4. Therefore, they are analyzed and rejected by the same rationale.

### ***Conclusion***


**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mitra Kianersi whose telephone number is (703) 305-4650. The examiner can normally be reached on 7:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (703) 308-5221. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Mitra Kianersi  
06/16/2004

  
**DAVID WILEY**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2100**